



# PRESENTATION

Kansas State University



# THE TEAM

## Summary

The Net Positive Studio is an interdisciplinary research and design effort in the College of Architecture, Planning, and Design at Kansas State University seeking to develop housing prototypes that are affordable, net zero, and strengthen and sustain communities. Partnering with Stafford County Economic Development (EcoDevo), a non-profit organization, the Net Positive Studio was tasked with the design of a single-family home in the rural town of St. John, Kansas. For the 2020 Solar Decathlon Build Challenge, the studio has researched and developed a design to meet the challenges St. John has been facing. The goal of the studio is to design and build a house that supports the community, providing high quality homes to replace a shrinking housing stock, while encouraging households to invest in their town. The designed prototype intends to demonstrate an innovative approach to high performance building that is both replicable and affordable, while providing a safe, high-quality and high-functioning house that is accessible to a broader spectrum of the residents.

## Members

### Team Leaders

- Michael Gibson .....Faculty Advisor
- Paul Kerr .....Engineering Advisor
- Evan Ollenburg .....Student Team
- Somnath Mukherjee
- Catherine Gutman
- Grant Urban
- Jameson Jones
- Jordan Bezdek
- Brandon Cole
- Jeremiah Vick
- Prajakta Thipsay
- Gaurav Neupane
- Yu He
- Braeden Busenitz
- Sergio Bichara
- Rebekka Poole
- Yumening Cao
- Safa Salih
- Amber Morris
- Matthew Dickman
- Jessica Wyatt
- Joe Kutter
- Mi Chele Lee
- Kazem Namazi
- Danielle Dillaha
- Christian Carter
- Stephen Bregande
- Will Olds
- Kody Gabel
- Johnathan Disberger
- Catherine Matthews
- Abigail Steinert
- Salim Akli
- Aimee Farrell
- Alexandria Weber
- Atia Rahman
- Autumn Kayl
- Conrad Hivley
- Harley Schuster
- Justin Cresswell
- Kyler Milligan
- Travis Surmier
- Zachary Jensen

Online Media

- Website

Our studio website, [www.netpositive.org](http://www.netpositive.org), is where we as students house information about the Net Positive studio as a whole, highlight the individual students from each academic year, post information about our various projects, and is regularly updated with blog posts. This website also features as an access point to contact the studio.
- Blog

Our blog posts is where we have been sharing news regarding the process and progress of our projects, and it is hosted as part of our website. Students have been taking turns on a weekly rotation to make these writing entries.
- Instagram

Our intagram is being used as an additional source to get out information regarding our studio to the public. We are located at @netpositivestudio. Small groups of students have taken on the task of running this account over the past three academic years.

**Shop Resources** APD West is an off-campus shop that the studio can use exculsivley for fabrication. There were a few tools there that the Fabrication Lab on campus does not let their students use very often. This would be tools like the demolition saw and the hand held saw. This location required a second training session in addition to on campus shop training. The shop professor would tell us about the tool, what its used for, and safety tips. With the hand held saw we were talk about the guards that we use, how to a line the blade to he guard to make sure your cut is ninety degrees. We were shown how to secure a track for hand saws and to set the depth of the blade.

With this shop being off campus there are a few things that we do differently than at the shop on campus. We have the advantage of having the floor space to recieve and manage large amounts of materials that we would otherwise not be able to recieve and work with. The space additionally allows us to build, organize, and stack prefab panels with the help of a gentry crane. We are also able to have access to all of the equipment needed for safe and accurate wood construction.



Class Training

Every student was trained on campus in the fabrication lab. The trainer worked slowly with every student. We all started out reading the term of the shop, knowing general rules of safety. This includes not wearing headphones while working, never being the shop alone working, always wear eye protection, and never wearing work gloves unless you are moving materials. After ever student read through the main rules of the shop the work shop professors walked everyone around the shop talked about how to use each and every machine, and which tools in the shop you are not allowed to use with-out help of a shop hand or the professor. After walking around the shop we worked with each tool. The shop professor Showed us how to turn on every tool use it and turn it off. After watching him use a tool every student use the tool with his supervision. This was to make sure that when you are in the shop you are using the tools in correct way, and your hands are in the right place.

